-- ABSTRACT:

In high-voltage devices comprising a lightly doped region (3) provided with a heavily doped contact zone 4, damage caused by local breakdown at the corner of the contact zone may occur as a result of the Kirk effect at a high current density. To improve the robustness of the device, an annular protection zone (14) of the same conductivity type is provided so as to surround the contact zone at a small distance. As a result, breakdown will occur initially at the corner of the protection zone. However, due to the resistance between the protection zone and the contact zone, a more uniform current distribution is obtained, which prevents damage caused by local current concentration.

10 Fig. 2

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